3. City is unaware of its precarious water supply and leaky pipes until it fails to deliver on promises to new development.

These recommendations address this problem in four ways. First, the use of hydrologic models in every river basin means that forecasting future water budgets will no longer be left to each water system on its own. This brings the best current scientific models of water supply and demand to bear on this important forecasting need. A well-designed hydrologic model will show with high levels of confidence whether and where there are likely to be water supply/demand imbalances in the foreseeable future.

Second, where the models show problems are likely to exist in the next twenty to forty years, these recommendations propose a regional approach to planning, using the river basin planning models already demonstrated in part in the Catawba and Cape Fear basins. Water systems that are predicted to have difficulty meeting their expected commitments will be a shared problem of the entire river basin. This allows for the possibility of regional efforts to bring future supply and demand into balance, just like an agency or a family that must balance a budget.

Third, local water supply planning and other reporting requirements about water will be consolidated, streamlined, and open to more scrutiny. More resources will be devoted to creation, review, and approval of water supply plans, reducing the chance that local governing boards do not understand the degree to which their supply is not capable of supporting the growth they want.

Fourth, the Local Government Commission will be more involved in review of revenues and expenditures of water systems, with a particular focus on whether operations, maintenance, repair, and replacement of infrastructure are adequately funded. The state's goal for pricing water should be to fully cover costs, including depreciation of the infrastructure; it should not be to come up with the lowest possible cost for water.

4. Strong population and commercial growth in the headwaters leaves a water system no or few options for additional supply.

These recommendations address this problem, the difficulty and expense of water supply development in the state's high-growth regions, in two ways. First, by setting out a path for water supply reservoir development in places with minimal environmental impacts and maximum benefits as a water supply, the recommendations would help reduce the long lead times for developing water supplies. Second, by setting up river basin planning groups that could build trust and working relationships between water systems and water users, and giving those groups the power and a means of promoting shared water facilities with enhanced access to state funding resources, the recommendations could help solve the difficult intergovernmental problems posed by settlement patterns across North Carolina.